**Preliminary Plans Presentation** 

# New School SAMPLE Elementary School

Prepared for Montgomery County Board of Education

September 2015

# Sample Elementary School

Street Address \_\_\_\_\_, Maryland, 208xx

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Mr. Michael P. Shpur	Architect, Division of Construction
Mr	Project Manager, Division of Construction
Ms	Facility Planner, Division of Long-range Planning

# **Involvement**

The preliminary plans for the Sample Elementary School were developed based on the educational specifications prepared by Montgomery County Public Schools (MCPS). Through a series of public meetings, several design alternatives were developed and evaluated. The proposed plans presented herein were reviewed and subsequently modified in accordance with recommendations and suggestions received during the schematic design meetings.

# **Participants in Facility Advisory Process**

<b>Background/History</b>	
Location:	Street Address, Rockville, Maryland, 20852
Cluster:	High School Cluster
History and Square Footage	
of Existing Building:	

Site Size:

10.9 acres

# **Program and Planning Objectives**

The purpose of this project is to construct a new elementary school to accommodate enrollment growth in the \_\_\_\_\_\_ cluster. The Sample Elementary School will be designed with a capacity 737 students with a core capacity or a core capacity for 740 students. The flexible building design for the school will accommodate current and future elementary school programs and delivery models. A philosophy of adaptable classrooms will facilitate various presentation formats and learning activities. Interactive education computer technology has been incorporated in the plan. Furniture that is easily reconfigurable will be provided to maximize flexibility throughout the school.

The building and site design will include the following:

- A well-defined and welcoming entrance with access control and supervision;
- Clear internal circulation with simple way finding;
- After-hours community use of the gymnasium, multipurpose room, and instructional media center that can be secured from the rest of the building
- Separation of vehicular and pedestrian traffic on site

If there are any planning issues, then include them in a separate paragraph here.

# **Teaching Stations and Spaces Provided When Complete**

(Number of teaching stations calculated in the program capacity is indicated within parentheses)

#### Classrooms:

Kindergarten Classrooms	
Standard Classrooms (Grades 1–5)	(
Preschool Education Program (PEP)	
Music	
Dual Purpose Room	
Art	

#### **Core Facilities:**

Administrative Suite	
Health Suite	
Multipurpose Room with Platform	
Kitchen	
Library Media Center	
Gymnasium	

#### **Total Teaching Stations**

#### Support Spaces:

(5)	Speech/Language Room	1
(30)	Instrumental Music	1
(3)	Therapy/Support Room	1
1	Large Instructional Support Room	1
1	Small Instructional Supp9ort Room	2
1	Testing Conference Room	1
	Instructional Data Assistant Office	1
	Support Staff Offices	2
1	Counselor's Office	1
1	Itinerant Staff Office	1
1	Staff Development Office	1
1	Reading Specialist Office	1
1	Training/Conference Room	1
1	Workroom	2
	Staff Lounge	1
(30)	Conference Room	1
	Building Services Suite	1
	Compactor Room	1
	General Storage	4
	PTA Storage	1
	Outdoor Storage	1

### **Building Design**

#### **General Description:**

The proposed building repeats the design concept from the \_\_\_\_\_\_ and \_\_\_\_\_ elementary schools and is adapted to meet program objectives and site adjustments. The new school will be a partial two-story building with steel-frame structure and brick and metal cladding on exterior facades.

The main entrance to the building is clearly identifiable from \_\_\_\_\_\_Drive. The administrative suite is located at the front of the building to allow supervision of the main entrance, lobby, and the bus loop. The secondary entrance, off \_\_\_\_\_\_Lane, can be used for access to the gymnasium and the multi-purpose room after school hours and is connected by a walkway to the parking lot for use by the community.

The academic classrooms are clustered and located on two floor levels. The classrooms on the first level include Preschool Education Program (PEP), prekindergarten through grade two and classrooms on the second floor level include grade three through grade five.

#### **Classroom Technology:**

Classrooms will be designed with wireless network access and interactive whiteboard systems to support the interactive and mobile technologies that allow students to participate in technology enriched learning. The mobile technology will support flexibility to reconfigure classrooms and learning throughout the instructional day. Full building wireless technology will enable schools to access digital content, curricular, and instructional resources with greater flexibility and efficiency.

#### **Code Compliance/Accessibility:**

All areas in the school will be designed to meet national and local codes including fire, life-safety, accessibility, and health standards. The proposed building will be in full compliance with the *Americans with Disabilities Act (ADA)*. The proposed building will be in compliance with the Maryland Emergency Management Agency (MEMA) Emergency Shelter Compliance Procedure as required under the *Code of Maryland Regulations* (COMAR).

### **Building Design** (continued)

#### **Mechanical Systems**

#### **HVAC System:**

The new building will be heated and air-conditioned by a two-pipe hydronic heat pump (HHP) system. The HHP system will consist of individual vertical water-cooled units for each classroom. Heating and cooling are provided by a geothermal ground source system. Ventilation for the classrooms will be provided by integrated energy-recovery units mounted on the roof.

#### **Plumbing System:**

Plumbing fixtures will comply with *Americans with Disabilities Act (ADA)* requirements. The balance of the sanitary sewer and domestic water systems will be provided in accordance with the latest Washington Suburban Sanitary Commission (WSSC) Plumbing and Fuel Gas Code and Regulations. Water-conserving plumbing fixtures will be used.

#### **Fire Protection System:**

The building will be fully-sprinklered complying with the *National Fire Protection Association Code (NFPA-13 and 14)* and will be provided with a voice-annunciated fire alarm system.

#### **Energy Management Statement:**

A primary design factor is the conservation of energy. The importance and consideration placed on energy conservation are reflected in the configuration and orientation of the building, the selection of materials, and the mechanical/electrical systems utilized. In addition, a direct digital automatic temperature control system will be provided to monitor and control all new HVAC equipment from a central building management system. The building will be designed to exceed ASHRAE 90.1-2010 energy requirements and International Building Code (IBC), Basic Energy Conservation codes as well as Montgomery County energy conservation codes. The design will incorporate the ANSI/ASHRAE Energy Efficient Design for new buildings.

# Vicinity Map



# **Existing Site Plan**



# **Proposed Site Plan**



### **First Floor Plan**

#### Legend

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14

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16

17

3S

- KINDERGARTEN 21 CLASSROOM PREKINDERGARTEN CLASSROOM CLASSROOM CLASSROOM (SPECIAL ED) BREAK-OUT ROOM READING/LANGUAGE ARTS ELEVATOR MACHINE ROOM OCCUPATIONAL THERAPY /PHYSICAL THERAPY SPEECH CONTROL ROOM INSTRUCTIONAL MEDIA CENTER 11 MATERIAL PREPARATION/ OFFICE 12 COMPUTER LABORATORY 13 GYMNASIUM GYM OFFICE INSTRUMENTAL MUSIC Т MUSIC S DUAL PURPOSE ROOM E ART CLASSROOM С
- 18 19 PLATFORM
- 20 MULTI-PURPOSE ROOM
- STAFF LOUNGE 22 KITCHEN 23 **BUILDING SERVICES** 24 TRASH ROOM 25 HEALTH 26 WORK ROOM 27 RECORDS 28 MECHANICAL ROOM 29 ELECTRICAL ROOM 30 MAIN OFFICE 31 TELEPHONE ROOM 32 ASSISTANT PRINCIPAL'S OFFICE CONFERENCE ROOM 33 34 PRINCIPAL'S OFFICE 35 RECYCLING ROOM 36 PEP CLASSROOM PEP CONF. ROOM 37 38 PEP OFFICE 39 PEP KITCHENETTE 40 PEP OBSERVATION TOILET

STORAGE

ELEVATOR

EDUCATIONAL

COURTYARD



# **Second Floor Plan**

#### Legend

- 44 CLASSROOM
- 44S CLASSROOM
- (SPECIAL ED)
- 45 BREAK-OUT ROOM 46 TESTING/
- 46 TESTING/ CONFERENCE
- 47 OFFICE
- 47 OFFICE 48 ESOL
- 49 COUNSELOR'S
- OFFICE

- 50 STAFF DEVELOPMENT OFFICE
- 51 RESOURCE
- 52 OFFICE
- 53 WORKROOM
- 54 MECHANICAL MEZZANINE
- T TOILET
- S STORAGE
- E ELEVATOR
- L ELEVATOR



# **Elevations**



# **Project Team, Schedule, and Estimated Construction Cost**

# **Design Team Members**

Architects Civil Engineer Structural Engineer Mechanical/Electrical Engineer Kitchen Consultant LEED Consultant

# **Project Schedule**

Preliminary Plans Brochure Construction Documents Completion Award Construction Contract Project Completion

# **Estimated Construction Costs**

Building Area: New Construction 87,867 square feet

Construction Cost: Base Building and Site: